

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008764**Date Inspected:** 22-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

2AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray structure bolted to Bottom panel T-Rib structure both North and South side for Segment Lift 4 West (4AW to 4BW) between PP 24 to 28. Inspected 10% of bolts on random basis and found the tension to be in general compliance. Bolt sizes used are M ¾ x 2 ¼ RC Lot No. DHG60571 and final torque required is 393 N-m. Manual Torque wrench is been used with Sr. No. X02-599.

5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) at Segment Side Panel to Bottom Panel connecting weld for segment 5BW to 5CW for shop Segment to Segment weld. The weld joint no. SEG-025A-008 for Segment 5CW and SEG-023A-005 for Segment 5BW welding was in progress. The welder is identified as 220064. In process FCAW appears to be progressing in compliance with Caltrans

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Engineer Approved welding procedure i.e., WPS-345-FCAW-1G(1F)-Repair-1.

5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Side Panel to Side Panel weld for segment 5BW to 5CW for shop Segment to Segment weld. The weld joint no. OBW5A-14 and 15 welding was in progress. The welder is identified as 202841 and 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T.

5BW to 5CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Corner assembly hold back areas. The weld joint no. OBW 5-1-15 welding was in progress. The welder is identified as 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T.

1AAW to 1AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Floor Beam to Bottom Panel connecting weld the weld was carbon arc gouged and re-welding being performed against Critical Weld Report BCWR-667 for rectification. The weld joint no. SSD34A-PP8.5-003 and SSD34-PP8.5-007 welding was in progress. The welder is identified as 220067 and 220066. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U5-F.

1AAW to 1AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for I-Rib Stiffeners welded to Deck Panel after welding during visual inspection found misaligned and thus weld carbon arc gouged and repair being performed against Critical Weld Report BCWR-666. The weld joint no. SEG 1E-875/874 and 843 welding was in progress. The welder is identified as 220063. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2234-C-U2-F.

5BW to 5CW

This Quality Assurance (QA) Inspector observed at segment 5BW to 5CW Segment to Segment welding was in progress for Side Panel to Side Panel Counter Weight Side between PP 34 and 35.

5BW

This Quality Assurance (QA) Inspector observed at Segment 5BW Cross Beam Side Longitudinal Stiffener flange weld of Longitudinal Diaphragm connected to Floor Beam removed completely by carbon arc gouging and bevel preparation for CJP weld was in progress.

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5AE to 5BE

This Quality Assurance (QA) Inspector observed at segment 5AE to 5BE U-Rib to U-Rib (close rib) internal side splice plate installation was in progress.

5BE to 5CE

This Quality Assurance (QA) Inspector observed at segment 5BE to 5CE between PP 34 and 35 steel backing bar installation was in progress for Deck Panel from inside the OBG segment for SAW welding.

1BW

This Quality Assurance (QA) Inspector observed at PP 12.5 and PP 13 for Segment 1BW to 2AW Bottom Panel "I" Stiffener double bevel preparation by grinding was in progress.

1AAW to 1AW

This Quality Assurance (QA) Inspector observed at segment 1AAW to 1AW after welding visual inspection for Deck Panel I-Rib performed and found misaligned. Noticed as per Critical Weld Repair B-CWR666 repair work was being performed.

1AAE to 1AE

This Quality Assurance (QA) Inspector observed at segment 1AAE to 1AE hold back areas welding and grinding was in progress for rectifying visual discontinuities and flush grinding was in progress.

2AE to 2BE

This Quality Assurance (QA) Inspector observed at segment 2AE to 2BE Bike Path Side Travelers Rail Brackets bolts installation and Snug Tightening is in progress.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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